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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,256	09/01/2005	Jarkko Oksala	915-007.137	4647
10/945 7590 12/21/2010 NOKIA CORPORATION c/o Ware, Fressola, Van Der Stuyts & Adolphson LLP Building Five, Bradford Green 755 Main Street, PO Box 224 Monroe, CT 06468			EXAMINER TORRES, MARCOS L	
			ART UNIT 2617	PAPER NUMBER
			MAIL DATE 12/21/2010	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/530,256

Applicant(s)

OKSALA ET AL.

Examiner

MARCOS L. TORRES

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-16,18 and 20-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-16,18 and 20-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Correspondence Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6-28-2010 has been entered.

Response to Arguments

2. Applicant's arguments filed 1-14-10 have been fully considered but they are not persuasive.

3. Regarding applicant's representative [hereinafter applicant] arguments that "as amended, claim 1 recites that checking whether the quality of service ("QoS") of the first connection can be guaranteed when the resource is jointly used by the first and second connections occurs while the first connection is being established. Both Naghian and Eswara fail to disclose this feature of the claim ... Because the estimate in Naghian is based in part on the "current load," it is clear that Naghian fails to disclose checking, while establishing the first connection (which in Naghian is the basis for the current load), whether QoS requirements of the first connection can still be guaranteed when there is also a second connection"; Naghian clearly discloses that new requests are

only to be admitted if they do not degrade the QoS for existing users, thereby maintaining [guarantying] the QoS of existing users (see abstract). The claim does not require that the checking has to be with any specific load [current load], only it is required to check if the QoS can be maintained.

4. As to applicant's argument that "Eswara fails to disclose when allocating resources to a first connection, checking whether the QoS of the first connection can be guaranteed when the resource is jointly used by the first and second connection"; Eswara is only being relied to show to manage the resources proactively [before the request], the primary reference Naghian is the one that discloses when allocating resources to a first connection, checking whether the QoS of the first connection can be maintained when the resource is jointly used by the first and second connection (see page 6, lines 12-19). Also applicant arguments "It is not seen how the availability of radio channels from adjacent cells has any suggestion with respect to modifying transmission resources between two entities when a second bearer request is made between these two entities"; Eswara is only being relied to show to manage the resources proactively [before the request], because both references are directed to manage wireless resources they are analogous and brings to proactively manage the resources in Naghian.
5. The rest of the arguments they fall for the same reasons as shown above. The rejection in record stands.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1, 4-9, 11-13, 18, 20-23, 28-29 and 31-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naghian WO 00/49824 in view of Eswara 6219554.

10. As to claim 1, Naghian discloses a method comprising: establishing a first connection between a first entity and a second entity, said establishing including determining transmission resources to be used for said first connection wherein the determining of transmission resources further comprises checking whether QoS requirements of said first connection that exists between said first entity and said second entity can still be guaranteed when transmission resources for a transmission between said first entity and a second entity are jointly used by said first connection and after establishment of said second connection, with said second connection (see page 6, lines 12-19), and controlling the use of at least one portion of said transmission resources by at least one of said first and second connections, accordingly (see page 6, lines 29-34). Naghian does not specifically disclose the checking before the request. In an analogous art, Eswara discloses checking before the request (see abstract). Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention was made to combine this teaching for the simple purpose of avoiding delays to the user.

. As to claims 4 and 31, Naghian discloses the method according wherein said step of controlling the use of at least one portion of said transmission resources comprises reducing the QoS requirements of said first connection and changing the portion of said transmission resources that can be used by said first connection, if it is determined that said QoS requirements of said first connection can no longer be guaranteed when said transmission resources are jointly used by said first connection and said second connection (see page 8, lines 9-23).

As to claims 5 and 32, Naghian discloses the method wherein said step of controlling the use of at least one portion of said transmission resources comprises changing the portion of said transmission resources that can be used by said first connection, if it is determined that said QoS requirements of said first connection can still be guaranteed when said transmission resources are jointly used by said first connection and said second connection (see page 8, lines 24-30).

As to claims 6 and 33, Naghian discloses the method wherein said steps of checking and controlling are performed before said first and second connection connections have been established [note that the reference disclose check and control for existing and new connections, thereby the new connection then will be the first and second] (see page 6, lines 9-19).

As to claims 7 and 34, Naghian discloses the method wherein said steps of checking (208, 211) and controlling are performed after said first connection has been established and before said second connection has been established (see page 6, lines 32-34).

As to claim 8, Naghian discloses the method wherein said transmission resources characterize the data transmission capabilities of said first and/or second entity (see page 6, lines 32-34).

As to claim 9, Naghian discloses the method wherein said step of checking is at least partially performed by a transmission resources control instance that interacts with said first and/or second entity (see page 7, lines 1-21).

As to claim 11, Naghian discloses the method wherein said entities are contained in a mobile station and in a network of a wireless communication system (see page 5, lines 6-15), in particular a 3G mobile radio system (see page 3, lines 4-6).

As to claims 12 and 35, Naghian discloses the method wherein said first and second connections are packet-switched connections between said entities in said mobile station and said network (see page 3, lines 4-6).

As to claims 13 and 36, Naghian discloses the method wherein said QoS requirement of said first connection is a minimum bit rate (see page 11, lines 2-13).

As to claim 18 is the corresponding computer program product claim of the method claim 1. Therefore, it is rejected for the same reasons.

As to claim 20, Naghian discloses an apparatus comprising: a processor configured to establish a first connection between a first entity and a second entity, to determine during the establishment of said first connection, transmission resources to be used for said first connection, wherein the determining of transmission resources further comprises a processor configured to check, whether QoS requirements of said first connection that exists between said first entity and said second entity can still be guaranteed when said transmission resources for a transmission between said first entity and said second entity are jointly used by said first connection and, after establishment of said second connection, with said second connection (see page 6, lines 12-19), and for at least partially controlling the use of at least one portion of said transmission resources by at least one of said first and second connections, accordingly (see page 6, lines 29-34). Naghian does not specifically disclose the

checking before the request. In an analogous art, Eswara discloses checking before the request (see abstract). Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention was made to combine this teaching for the simple purpose of avoiding delays to the user.

As to claim 21, Naghian discloses the apparatus in a wireless communication system, wherein said first entity is comprised in said mobile station and wherein said second entity is comprised in a network of said wireless communication system (see page 6, lines 12-19, 29-34).

As to claim 22, Naghian discloses the apparatus wherein said transmission resources characterized the data transmission capabilities of said first entity and/or said second entity (see page 6, lines 9-22).

As to claim 23, Naghian discloses the apparatus wherein said processor is further configured to interacts with said first entity and/or said second entity (see page 6, lines 9-22).

As to claim 28, Naghian discloses the apparatus which is a network element in a wireless communication system, wherein said first entity is comprised in a mobile station of said wireless communication system and a second entity in a network element (see page 6, lines 12-19, 29-34).

As to claim 29, Naghian discloses an apparatus comprising: means for establishing a first connection as a packet-switched connection between a first entity and a second entity, said establishing including determining transmission resources to be used for said first connection, wherein the means for determining of transmission

resources further comprises means for checking whether quality of service requirements of said first connection that exist between said first entity and said second entity can still be guaranteed when transmission resources for a transmission between said first entity and said second entity are jointly used by said first connection and, after the establishment of said second connection, and means for at least partially controlling the use of at least one portion of said transmission resources by said first connection, accordingly (see page 6, lines 12-19, 29-34). Naghian does not specifically disclose the checking before the request. In an analogous art, Eswara discloses checking before the request (see abstract). Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention was made to combine this teaching for the simple purpose of avoiding delays to the user.

As to claims 37-38, Naghian discloses wherein the connections are provided by the same bearer (see page 6, lines 12-19, 29-34; page 16, line 30—page 17, line 20).

11. Claims 2 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naghian in view of Eswara and further in view of Kim 6771648.

As to claims 2 and 30, Naghian discloses everything as explained above except for the method wherein said step of controlling the use of at least one portion of said transmission resources comprises pausing or releasing said first connection, if it is determined that said QoS requirements of said first connection can no longer be guaranteed when said transmission resources are jointly used by said first connection and said second connection. In an analogous art, Kim discloses the method wherein said step of controlling the use of at least one portion of said transmission resources

comprises pausing or releasing said first connection, if it is determined that said QoS requirements of said first connection can no longer be guaranteed when said transmission resources are jointly used by said first connection and said second connection (see col. 2, lines 39-44). Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to limit and release any connection according the connection priority for the simple purpose of avoiding an overload.

12. Claims 10 and 24 rejected under 35 U.S.C. 103(a) as being unpatentable over Naghian in view of Eswara and further in view of Baj 7130273.

As to claims 10 and 24, Naghian discloses said quality of service requirements of said first connection can still be guaranteed when said hardware capabilities for said transmission between said first entity and said second entity are jointly used by said first connection and said second connection (see page 6).Naghian does not disclose checking capabilities of hardware that is used by said first or second entity. In an analogous art, Baj discloses the method wherein said step of checking comprises the step of checking capabilities of hardware that is used by said first or second entity (see col. 5, lines 45-60). Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to check the capabilities of the hardware to optimize the system and diagnostic the mobile device and maintain the quality of the service.

13. Claims 14-15 and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naghian in view of Eswara and further in view of Casati 7,301,934.

As to claims 14 and 25, Naghian discloses as said first connection and a second connection, and wherein said step of checking determines whether bit rate requirements

of said connection can still be guaranteed when said transmission resources are used (see page 6, lines 9-45) . Naghian does not specifically disclose the method according wherein said wireless communication system is capable of operating a Dual Transfer Mode (DTM) that comprises a packet-switched connection, in particular a connection according to the General Packet Radio Service (GPRS), as said first connection and a circuit-switched connection as said second connection. In an analogous art Casati discloses the method according wherein said wireless communication system is capable of operating a Dual Transfer Mode (DTM) that comprises a packet-switched connection, in particular a connection according to the General Packet Radio Service (GPRS), as said first connection and a circuit-switched connection as said second connection (see col. 2, line 59 – col. 3, line 14). Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to combine these teaching to provide protocol roaming and increase bandwidth.

As to claims 15 and 26, Naghian discloses everything as explained above except for the method, wherein said packet-switched and circuit-switched connections are provided by a radio bearer, and wherein in said step of checking, said transmission resources control instance informs said bearer on the availability of said transmission resources. In an analogous art, Casati discloses the method, wherein said checking is at least partially performed by a transmission resources control instance that interacts with said first and/or second entity, and wherein in said packet-switched and circuit-switched connections are provided by a radio bearer, and wherein in said step of checking, said transmission resources control instance informs said bearer on the

availability of said transmission resources (see col. 3, lines 1-14). Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to inform the availability for the simple purpose letting know the mobile the service so the device could use it.

14. Claims 16 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naghian in view of Eswara and further in view of Casati as applied to claims 15 and 26 above, and further in view of Baj.

As to claims 16 and 27, Naghian discloses the method wherein said transmission resources control instance monitors the connections provided by said bearer and, based at least one said monitored connections and determines the availability of said transmission resources (see page 6, lines 9-34). Naghian and Casati fail to teach the use hardware profiles of said mobile station. In an analogous art, Baj discloses the use of hardware profiles of said mobile station (see col. 5, lines 45-60). Therefore, it would have been obvious to one of the ordinary skills in the art at the time of the invention to check the capabilities of the hardware to optimize the system and diagnostic the mobile device and maintain the quality of the service.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARCOS L. TORRES whose telephone number is (571)272-7926. The examiner can normally be reached on 9:30 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-252-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/
Supervisory Patent Examiner, Art Unit 2617

/Marcos L Torres/
Examiner, Art Unit 2617